



SEQUENCE LISTING

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TECH CENTER 1600/2900

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<120> COMPOSITIONS FOR THE DETECTION OF ENZYME ACTIVITY IN BIOLOGICAL SAMPLES
AND METHODS OF USE THEREOF

<130> M-903820US

<140> US 09/394,019

<141> 1999-09-10

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<151> 1998-02-20

<150> US 08/802,981

<151> 1997-02-20

<160> 257

<170> PatentIn version 3.0

<210> 1

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<223> Xaa is Aib or Pro

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Lys Asp Xaa Thr Gly Arg Thr Gly Pro Lys Gly Tyr
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Lys Asp Xaa Glu Val Asp Gly Ile Asp Pro Lys Gly Tyr
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Lys Asp Xaa Asp Glu Val Asp Gly Ile Asp Pro Lys Gly Tyr
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<222> (6)..(6)

<223> Xaa is norleucine

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<223> Xaa is Aib or Pro

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Gly Tyr

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<223> Xaa is epsilon aminoacproic acid

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Gly Tyr

<210> 15

<211> 13

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<222> (4)..(4)

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Gly Tyr

<210> 17

<211> 16

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<222> (16)..(16)

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1 5 10 15

<210> 18

<211> 19

<212> PRT

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<223> Residue blocked with Fmoc

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<222> (4)..(4)

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<220>

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<222> (5)..(5)

<223> Xaa is d form tetrahydroisoquinoline-3-carboxylic acid

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Lys Asp Pro Xaa Gly Xaa Asp Glu Val Asp Gly Ile Asn Gly Xaa Pro
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Lys Gly Tyr

<210> 19

<211> 17

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Lys Asp Pro Xaa Gly Asp Glu Val Asp Gly Ile Asn Gly Pro Lys Gly
1 5 10 15

Tyr

<210> 20

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Lys Asp Pro Gly Asp Glu Val Asp Gly Ile Asn Gly Xaa Pro Lys Gly
1 5 10 15

Tyr

<210> 21

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<222> (4)..(4)

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<220>

<221> MOD_RES

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1 5 10 15

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Lys Asp Pro Xaa Gly Glu Glu Val Glu Gly Ile Asn Gly Xaa Pro Lys
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Gly Tyr

<210> 23

<211> 18

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<222> (4)..(4)

<223> Xaa is epsilon amino caproic acid

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Lys Asp Pro Xaa Gly Asp Phe Val Asp Gly Ile Asn Gly Xaa Pro Lys
1 5 10 15

Gly Tyr

<210> 24

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<222> (4)..(4)

<223> Xaa is epsilon amino caproic acid

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Lys Asp Pro Xaa Gly Asp Glu Val Asp Gly Ile Asn Gly Xaa Pro Lys
1 5 10 15

Gly Tyr

<210> 25

<211> 18

<212> PRT

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<223> Synthetic peptide substrate

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<223> Blocked with Fmoc

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<222> (4)..(4)

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Lys Asp Pro Xaa Gly Asp Glu Val Asp Gly Ile Asn Gly Xaa Pro Lys
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Gly Tyr

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Lys Asp Xaa Xaa Gly Asp Glu Val Asn Gly Ile Asn Gly Xaa Pro Lys
1 5 10 15

Gly Tyr

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<220>

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<222> (4)..(4)

<223> Xaa is epsilon amino caproic acid

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Lys Asp Xaa Xaa Gly Asp Glu Val Asp Gly Ile Asp Gly Xaa Pro Lys
1 5 10 15

Gly Tyr

<210> 28

<211> 18

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<220>

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<222> (4)..(4)

<223> Xaa is epsilon amino caproic acid

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Lys Asp Xaa Xaa Gly Asp Glu Val Asp Gly Ile Asn Gly Xaa Pro Lys
1 5 10 15

Gly Tyr

<210> 29

<211> 18

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Gly Tyr

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<223> Xaa is alpha aminoisobutyric acid

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1 5 10 15

Lys Gly Tyr

<210> 31

<211> 18

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Gly Tyr

<210> 32

<211> 18

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<223> Xaa is epsilon amino caproic acid

<220>

<221> MOD_RES

<222> (3)..(3)

<223> Xaa is alpha aminoisobutyric acid

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1 5 10 15

Gly Tyr

<210> 33

<211> 18

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Gly Tyr

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<222> (3)..(3)

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Gly Tyr

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<223> Xaa is alpha aminoisobutyric acid

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1 5 10 15

Gly Tyr

<210> 36

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<222> (6)..(6)

<223> Xaa is tetrahydroisoquinoline-3-carboxylic acid

<220>

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<222> (15)..(15)

<223> Xaa is epsilon aminocaproic acid

<220>

<221> MOD_RES

<222> (4)..(4)

<223> Xaa is epsilon aminocaproic acid

<400> 36

Lys Asp Xaa Xaa Gly Xaa Asp Glu Val Asp Gly Ile Asp Gly Xaa Pro
1 5 10 15

Lys Gly Lys

<210> 37

<211> 19

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<220>

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<222> (3)..(3)

<223> Xaa is Aib

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<222> (6)..(6)

<223> Xaa is D form tetrahydroisoquinoline-3-carboxylic acid

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<222> (15)..(15)

<223> Xaa is epsilon aminocaproic acid

<220>

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<222> (4)..(4)

<223> Xaa is epsilon aminocaproic acid

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Lys Asp Xaa Xaa Gly Xaa Asp Glu Val Asp Gly Ile Asp Gly Xaa Pro
1 5 10 15

Lys Gly Tyr

<210> 38

<211> 19

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<221> MOD_RES

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Lys Asp Xaa Xaa Gly Trp Asp Glu Val Asp Gly Ile Asp Gly Xaa Pro
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Lys Gly Tyr

<210> 39

<211> 19

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<220>

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<222> (6)..(6)

<223> W is D form

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<222> (15)..(15)

<223> Xaa is epsilon aminocaproic acid

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<222> (4)..(4)

<223> Xaa is epsilon aminocaproic acid

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Lys Asp Xaa Xaa Gly Trp Asp Glu Val Asp Gly Ile Asp Gly Xaa Pro
1 5 10 15

Lys Gly Tyr

<210> 40

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<222> (16)..(16)

<223> Xaa is epsilon aminocaproic acid

<220>

<221> MOD_RES

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<223> Xaa is epsilon aminocaproic acid

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Pro Lys Gly Tyr
20

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<211> 20

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<223> Xaa is epsilon aminocaproic acid

<220>

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<222> (4)..(4)

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Pro Lys Gly Tyr
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<211> 14

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<210> 43

<211> 14

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<223> Synthetic peptide substrate

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<223> Xaa is Aib

<400> 43

Lys Asp Xaa Tyr Val Ala Asp Gly Ile Asn Pro Lys Gly Tyr
1 5 10

<210> 44

<211> 14

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<223> Synthetic peptide substrate

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<210> 45

<211> 16

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<223> Xaa is Aib

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<210> 46

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<223> Xaa is Aib

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<210> 47

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<221> MOD_RES

<222> (4)..(4)

<223> Xaa is epsilon aminocaproic acid

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Lys Asp Xaa Xaa Gly Tyr Val Ala Asp Gly Ile Asp Gly Xaa Pro Lys
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Gly Tyr

<210> 49

<211> 18

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<222> (14)..(14)

<223> Xaa is epsilon aminocaproic acid

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<222> (4)..(4)

<223> Xaa is epsilon aminocaproic acid

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Lys Asp Xaa Xaa Gly Tyr Val Ala Asn Gly Ile Asp Gly Xaa Pro Lys
1 5 10 15

Gly Tyr

<210> 50

<211> 18

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<222> (3)..(3)

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<222> (4) .. (4)

<223> Xaa is epsilon aminocaproic acid

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1 5 10 15

Gly Tyr

<210> 51

<211> 18

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<223> Synthetic peptide substrate

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<222> (3) .. (3)

<223> Xaa is Aib

<220>

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<222> (14) .. (14)

<223> Xaa is epsilon aminocaproic acid

<220>

<221> MOD_RES

<222> (4) .. (4)

<223> Xaa is epsilon aminocaproic acid

<400> 51

Lys Asp Xaa Xaa Gly Tyr Val Ala Asp Gly Ile Asn Gly Xaa Pro Lys
1 5 10 15

Gly Tyr

<210> 52

<211> 18

<212> PRT

<213> Artificial

<220>

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<223> Y is D form

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<222> (4)..(4)

<223> Xaa is epsilon aminocaproic acid

<400> 52

Lys Asp Xaa Xaa Gly Tyr Val Ala Asp Gly Ile Asn Gly Xaa Pro Lys
1 5 10 15

Gly Tyr

<210> 53

<211> 17

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

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<222> (1)..(1)

<223> K is blocked with Fmoc

<220>

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<222> (13)..(13)

<223> Xaa is episilon-aminocaproic acid

<220>

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<222> (4)..(4)

<223> Xaa is epsilon aminocaproic acid

<400> 53

Lys Asp Pro Xaa Gly Leu Val Glu Ile Asp Asn Gly Xaa Pro Lys Gly
1 5 10 15

Tyr

<210> 54

<211> 17

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

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<222> (4)..(4)

<223> Xaa is epsilon aminocaproic acid

<400> 54

Lys Asp Pro Xaa Gly Leu Val Glu Ile Glu Asn Gly Xaa Pro Lys Gly
1 5 10 15

Tyr

<210> 55

<211> 14

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

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<222> (3)..(3)

<223> Xaa is Aib

<400> 55

Lys Asp Xaa Leu Val Glu Ile Asp Asn Gly Pro Lys Gly Tyr
1 5 10

<210> 56

<211> 16

<212> PRT

<213> Artificial

<220>

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<220>

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<222> (3)..(3)

<223> Xaa is Aib

<400> 56

Lys Asp Xaa Gly Leu Val Glu Ile Asp Asn Gly Gly Pro Lys Gly Tyr
1 5 10 15

<210> 57

<211> 18

<212> PRT

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<222> (4)..(4)

<223> Xaa is epsilon aminocaproic acid

<400> 57

Lys Asp Xaa Xaa Gly Leu Val Glu Ile Asp Asn Gly Gly Xaa Pro Lys
1 5 10 15

Gly Tyr

<210> 58

<211> 18

<212> PRT

<213> Artificial

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<400> 58

Lys Asp Xaa Xaa Gly Leu Val Glu Ile Asn Asn Gly Gly Xaa Pro Lys
1 5 10 15

Gly Tyr

<210> 59

<211> 18

<212> PRT

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<400> 59

Lys Asp Pro Xaa Gly Ile Glu Thr Glu Ser Gly Val Gly Xaa Pro Lys
1 5 10 15

Gly Tyr

<210> 60

<211> 16

<212> PRT

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<220>

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<222> (4)..(4)

<223> Xaa is epsilon aminocaproic acid

<400> 60

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| Lys | Asp | Pro | Xaa | Gly | Ile | Glu | Thr | Asp | Ser | Gly | Xaa | Pro | Lys | Gly | Tyr |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |

<210> 61

<211> 16

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

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<222> (4)..(4)

<223> Xaa is epsilon aminocaproic acid

<400> 61

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Asp | Pro | Xaa | Gly | Ile | Glu | Thr | Glu | Ser | Gly | Xaa | Pro | Lys | Gly | Tyr |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |

<210> 62

<211> 17

<212> PRT

<213> Artificial

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<223> Synthetic peptide substrate

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<222> (3)..(3)

<223> Xaa is Aib

<400> 62

Lys Asp Xaa Gly Ile Glu Thr Asp Ser Gly Val Asp Asp Pro Lys Gly
1 5 10 15

Tyr

<210> 63

<211> 17

<212> PRT

<213> Artificial

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<223> Synthetic peptide substrate

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<222> (3)..(3)

<223> Xaa is Aib

<400> 63

Lys Asp Xaa Gly Ile Glu Thr Asn Ser Gly Val Asp Asp Pro Lys Gly
1 5 10 15

Tyr

<210> 64

<211> 19

<212> PRT

<213> Artificial

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<223> Synthetic peptide substrate

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<222> (3)..(3)

<223> Xaa is Aib

<400> 64

Lys Asp Xaa Gly Gly Ile Glu Thr Asp Ser Gly Val Asp Asp Gly Pro
1 5 10 15

Lys Gly Tyr

<210> 65

<211> 17

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<400> 65

Lys Asp Xaa Gly Gly Ile Glu Thr Asn Ser Gly Val Gly Pro Lys Gly
1 5 10 15

Tyr

<210> 66

<211> 17

<212> PRT

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<400> 66

Lys Asp Xaa Xaa Gly Ile Glu Thr Asp Ser Gly Val Xaa Pro Lys Gly
1 5 10 15

Tyr

<210> 67

<211> 17

<212> PRT

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<400> 67

Lys Asp Xaa Xaa Gly Ile Glu Thr Asn Ser Gly Val Xaa Pro Lys Gly
1 5 10 15

Tyr

<210> 68

<211> 19

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<222> (4)..(4)

<223> Xaa is epsilon aminocaproic acid

<400> 68

Lys Asp Xaa Xaa Gly Gly Ile Glu Thr Asp Ser Gly Val Gly Xaa Pro
1 5 10 15

Lys Gly Tyr

<210> 69

<211> 19

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

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<223> Xaa is Aib

<220>

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<222> (15)..(15)

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<222> (4)..(4)

<223> Xaa is epsilon aminocaproic acid

<400> 69

Lys Asp Xaa Xaa Gly Gly Ile Glu Thr Asn Ser Gly Val Gly Xaa Pro
1 5 10 15

Lys Gly Tyr

<210> 70

<211> 19

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

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<222> (3)..(3)

<223> Xaa is Aib

<400> 70

Lys Asp Xaa Gly Ser Glu Ser Met Asp Ser Gly Ile Ser Leu Asp Pro
1 5 10 15

Lys Gly Tyr

<210> 71

<211> 17

<212> PRT

<213> Artificial

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<222> (3)..(3)

<223> Xaa is Aib

<400> 71

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Asp | Xaa | Gly | Gly | Ser | Glu | Ser | Met | Asp | Ser | Gly | Gly | Pro | Lys | Gly |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |

Tyr

<210> 72

<211> 19

<212> PRT

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<223> Synthetic peptide substrate

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<223> Xaa is Aib

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<222> (15)..(15)

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<223> Xaa is epsilon aminocaproic acid

<400> 72

Lys Asp Xaa Xaa Gly Gly Ser Glu Ser Met Asp Ser Gly Gly Xaa Pro
1 5 10 15

Lys Gly Tyr

<210> 73

<211> 19

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<223> Synthetic peptide substrate

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<223> Xaa is epsilon aminocaproic acid

<400> 73

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Asp | Xaa | Xaa | Gly | Asp | Val | Val | Cys | Cys | Ser | Met | Ser | Gly | Xaa | Pro |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |

Lys Gly Tyr

<210> 74

<211> 19

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

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<222> (4) .. (4)

<223> Xaa is epsilon aminocaproic acid

<400> 74

Lys Asp Xaa Xaa Gly Asp Val Val Cys Asp Ser Met Ser Gly Xaa Pro
1 5 10 15

Lys Gly Tyr

<210> 75

<211> 19

<212> PRT

<213> Artificial

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<223> M is D form

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<400> 75
Lys Asp Xaa Xaa Gly Asp Val Val Cys Cys Ser Met Ser Gly Xaa Pro
1 5 10 15
Lys Gly Tyr

<210> 76
<211> 19
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<400> 76

Lys Asp Xaa Xaa Gly Asp Val Val Cys Asp Ser Met Ser Gly Xaa Pro
1 5 10 15

Lys Gly Tyr

<210> 77

<211> 19

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<222> (4)..(4)

<223> Xaa is epsilon aminocaproic acid

<400> 77

Lys Asp Xaa Xaa Gly Asp Val Val Cys Cys Pro Met Ser Gly Xaa Pro
1 5 10 15

Lys Gly Tyr

<210> 78

<211> 18

<212> PRT

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<222> (4)..(4)

<223> Xaa is epsilon aminocaproic acid

<400> 78

Lys Asp Xaa Xaa Gly Glu Asp Val Val Cys Cys Ser Gly Xaa Pro Lys
1 5 10 15

Gly Tyr

<210> 79

<211> 18

<212> PRT

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<222> (4)..(4)

<223> Xaa is epsilon aminocaproic acid

<400> 79

Lys Asp Xaa Xaa Gly Glu Asp Val Val Cys Asp Ser Gly Xaa Pro Lys
1 5 10 15

Gly Tyr

<210> 80

<211> 18

<212> PRT

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<223> Synthetic peptide substrate

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<223> Xaa is Aib

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<223> Xaa is episilon-aminocaproic acid

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<223> V is D form

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<221> MOD_RES

<222> (4)..(4)

<223> Xaa is epsilon aminocaproic acid

<400> 80

Lys Asp Xaa Xaa Gly Glu Asp Val Val Cys Cys Pro Gly Xaa Pro Lys
1 5 10 15

Gly Tyr

<210> 81

<211> 18

<212> PRT

<213> Artificial

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<223> Synthetic peptide substrate

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<221> MOD_RES
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<223> V is D form

<220>

<221> MOD_RES
<222> (4)..(4)
<223> Xaa is epsilon aminocaproic acid

<400> 81

| | | | | | | | | | | | | | | | |
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| Lys | Asp | Xaa | Xaa | Gly | Glu | Asp | Val | Val | Cys | Asp | Pro | Gly | Xaa | Pro | Lys |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |

Gly Tyr

<210> 82
<211> 19
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<221> MOD_RES

<222> (4)..(4)

<223> Xaa is epsilon aminocaproic acid

<400> 82

Lys Asp Xaa Xaa Gly Asp Val Val Cys Cys Ser Met Ser Gly Xaa Pro
1 5 10 15

Lys Gly Tyr

<210> 83

<211> 19

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<223> Synthetic peptide substrate

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<222> (15)..(15)

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<221> MOD_RES

<222> (4)..(4)

<223> Xaa is epsilon aminocaproic acid

<400> 83

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Lys Gly Tyr

<210> 84

<211> 19

<212> PRT

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<222> (15)..(15)

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<221> MOD_RES

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<223> V is D form

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<221> MOD_RES

<222> (4)..(4)

<223> Xaa is epsilon aminocaproic acid

<400> 84

Lys Asp Xaa Xaa Gly Asp Val Val Cys Cys Pro Met Ser Gly Xaa Pro
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Lys Gly Tyr

<210> 85

<211> 18

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<222> (4)..(4)

<223> Xaa is epsilon aminocaproic acid

<400> 85

Lys Asp Xaa Xaa Gly Asp Val Val Cys Cys Ser Met Gly Xaa Pro Lys
1 5 10 15

Gly Tyr

<210> 86

<211> 18

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<222> (4)..(4)

<223> Xaa is epsilon aminocaproic acid

<400> 86

Lys Asp Xaa Xaa Gly Asp Val Val Cys Asp Ser Met Gly Xaa Pro Lys
1 5 10 15

Gly Tyr

<210> 87

<211> 16

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<222> (4)..(4)

<223> Xaa is epsilon aminocaproic acid

<400> 87

Lys Asp Xaa Xaa Gly Val Cys Cys Ser Met Gly Xaa Pro Lys Gly Tyr
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<210> 88

<211> 16

<212> PRT

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<222> (4)..(4)

<223> Xaa is epsilon aminocaproic acid

<400> 88

Lys Asp Xaa Xaa Gly Val Cys Asp Ser Met Gly Xaa Pro Lys Gly Tyr
1 5 10 15

<210> 89

<211> 19

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<222> (4)..(4)

<223> Xaa is epsilon aminocaproic acid

<400> 89

Lys Asp Xaa Xaa Gly Asp Glu Met Glu Glu Cys Ser Gln His Leu Pro
1 5 10 15

Lys Gly Tyr

<210> 90

<211> 19

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

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<223> Xaa is Aib

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<221> MOD_RES

<222> (4)..(4)

<223> Xaa is epsilon aminocaproic acid

<400> 90

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|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Asp | Xaa | Xaa | Gly | Asp | Glu | Met | Glu | Glu | Cys | Pro | Gln | His | Leu | Pro |
| 1 | | | | 5 | | | | 10 | | | | | | 15 | |

Lys Gly Tyr

<210> 91

<211> 19

<212> PRT

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<220>

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<222> (4)..(4)

<223> Xaa is epsilon aminocaproic acid

<400> 91

Lys Asp Xaa Xaa Gly Asp Glu Met Glu Glu Asp Ser Gln His Leu Pro
1 5 10 15

Lys Gly Tyr

<210> 92

<211> 18

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<213> artificial sequence

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<223> Xaa is Aib

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<222> (4)..(4)

<223> Xaa is epsilon aminocaproic acid

<400> 92

Lys Asp Xaa Xaa Gly Glu Met Glu Glu Cys Ser Gln His Leu Pro Lys
1 5 10 15

Gly Tyr

<210> 93

<211> 18

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<400> 93

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Gly Tyr

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Gly Tyr

<210> 95

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Lys Gly Tyr

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Lys Gly Tyr

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Pro Lys Gly Tyr
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<210> 99

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Tyr

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Lys Asp Xaa Xaa Gly Val Met Thr Gly Arg Thr Gly Xaa Pro Lys Gly
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Tyr

<210> 103

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Tyr

<210> 104

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1 5 10 15

Tyr

<210> 105

<211> 16

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Lys Asp Xaa Xaa Gly Val Met Thr Gly Arg Gly Xaa Pro Lys Gly Tyr
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<210> 106

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Tyr

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Tyr

<210> 108

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<223> K is blocked with Fmoc

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<400> 109

Asp Pro Thr Gly Arg Thr Gly Pro Lys Gly Tyr
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<210> 110

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Lys Asp Pro Val Met Thr Gly Arg Thr Gly Xaa Pro Lys Gly Tyr
1 5 10 15

<210> 111

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<400> 111

Lys Asp Pro Thr Gly Arg Thr Gly Xaa Pro Lys Gly Tyr
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<210> 112

<211> 15

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<400> 112

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| Lys | Asp | Pro | Xaa | Gly | Thr | Gly | Arg | Thr | Gly | Xaa | Pro | Lys | Gly | Tyr |
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<210> 113

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<210> 114

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1 5 10

<210> 116

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<400> 116

Lys Asp Pro Xaa Thr Gly Arg Thr Gly Pro Lys Gly Tyr
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<210> 117

<211> 13

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<210> 118

<211> 17

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<400> 118

Lys Asp Xaa Xaa Gly Val Met Thr Gly Arg Val Gly Xaa Pro Lys Gly
1 5 10 15

Tyr

<210> 119

<211> 17

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<400> 119

Lys Asp Xaa Xaa Gly Val Met Thr Gly Arg Val Gly Xaa Pro Lys Gly
1 5 10 15

Tyr

<210> 120

<211> 17

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Lys Asp Xaa Xaa Gly Val Met Thr Gly Arg Ala Gly Xaa Pro Lys Gly
1 5 10 15

Tyr

<210> 121

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<223> Xaa is epsilon aminocaproic acid

<400> 121

Lys Asp Xaa Xaa Gly Val Met Thr Gly Arg Ala Gly Xaa Pro Lys Gly
1 5 10 15

Tyr

<210> 122

<211> 26

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<223> K is blocked with Fmoc

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1 5 10 15

Pro Lys Gly Tyr Gly Xaa Pro Lys Gly Tyr
20 25

<210> 123

<211> 20

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<400> 123

Lys Asp Pro Xaa Gly Ser Glu Val Lys Leu Asp Ala Glu Phe Gly Xaa
1 5 10 15

Pro Lys Gly Tyr
20

<210> 124

<211> 20

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<223> Xaa is epsilon aminocaproic acid

<400> 124

Lys Asp Pro Xaa Gly Ser Glu Val Lys Leu Asp Ala Glu Phe Gly Xaa
1 5 10 15

Pro Lys Gly Tyr
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<210> 125

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<223> Xaa is epsilon aminocaproic acid

<400> 125

Lys Asp Xaa Xaa Gly Ser Glu Val Asn Leu Asp Ala Glu Phe Gly Xaa
1 5 10 15

Pro Lys Asp Asp Tyr
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<210> 126

<211> 21

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Pro Lys Asp Asp Tyr
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<210> 127

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Lys Asp Xaa Xaa Gly Ser Glu Val Lys Met Asp Ala Glu Phe Gly Xaa
1 5 10 15

Pro Lys Asp Asp Tyr
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<210> 128

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Lys Asp Xaa Xaa Gly Ser Glu Val Lys Met Asp Asp Glu Phe Gly Xaa
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Pro Lys Asp Asp Tyr
20

<210> 129
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<223> Xaa is epsilon aminocaproic acid

<400> 129

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| Lys | Asp | Xaa | Xaa | Gly | Ser | Glu | Val | Asn | Leu | Asp | Asp | Glu | Phe | Gly | Xaa |
| 1 | | | 5 | | | | | | 10 | | | | | 15 | |

| | | | | |
|-----|-----|-----|-----|-----|
| Pro | Lys | Asp | Asp | Tyr |
| | | | 20 | |

<210> 130

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<400> 130

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|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Asp | Xaa | Xaa | Gly | Gly | Val | Val | Ile | Ala | Thr | Val | Ile | Val | Ile | Thr |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |

| | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|
| Gly | Xaa | Pro | Lys | Asp | Asp | Tyr |
| | | | 20 | | | |

<210> 131

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Thr Gly Xaa Pro Lys Asp Asp Tyr
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Lys Asp Xaa Xaa Gly Val Ile Ala Thr Val Ile Gly Xaa Pro Lys Asp
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Asp Tyr

<210> 133

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<223> Xaa is epsilon aminocaproic acid

<400> 133

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| Lys | Asp | Xaa | Xaa | Asx | Tyr | Gly | Val | Val | Ile | Ala | Gly | Xaa | Pro | Lys | Asp |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |

Asp Tyr

<210> 134

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<222> (4) .. (5)

<223> Xaa is epsilon aminocaproic acid

<400> 134

| | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Asp | Xaa | Xaa | Xaa | Gln | Gln | Leu | Leu | His | Asn | Xaa | Xaa | Pro | Lys |
| 1 | | | | 5 | | | | | 10 | | | | | 15 |

<210> 135

<211> 15

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (3) .. (3)

<223> Xaa is Aib

<220>

<221> MOD_RES

<222> (13) .. (13)

<223> Xaa is episilon-aminocaproic acid

<220>

<221> MOD_RES

<222> (4) .. (4)

<223> Xaa is epsilon aminocaproic acid

<400> 135

| | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Asp | Xaa | Xaa | Gly | Gln | Gln | Leu | Leu | His | Asn | Gly | Xaa | Pro | Lys |
| 1 | | | | 5 | | | | | 10 | | | | | 15 |

<210> 136

<211> 13

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (3) .. (3)

<223> Xaa is Aib

<400> 136

| | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Asp | Xaa | Gly | Gln | Gln | Leu | Leu | His | Asn | Gly | Pro | Lys |
| 1 | | | | 5 | | | | | 10 | | | |

<210> 137

<211> 11

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (3) .. (3)

<223> Xaa is Aib

<400> 137

Lys Asp Xaa Gln Gln Leu Leu His Asn Pro Lys
1 5 10

<210> 138

<211> 15

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (3)..(3)

<223> Xaa is Aib

<220>

<221> MOD_RES

<222> (12)..(13)

<223> Xaa is epsilon-aminocaproic acid

<220>

<221> MOD_RES

<222> (4)..(5)

<223> Xaa is epsilon aminocaproic acid

<400> 138

Lys Asp Xaa Xaa Xaa Ser Ile Gln Tyr Thr Tyr Xaa Xaa Pro Lys

| | | | |
|---|---|----|----|
| 1 | 5 | 10 | 15 |
|---|---|----|----|

<210> 139
 <211> 15
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic peptide substrate
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 <222> (3)..(3)
 <223> Xaa is Aib

<220>
 <221> MOD_RES
 <222> (13)..(13)
 <223> Xaa is episilon-aminocaproic acid

<220>
 <221> MOD_RES
 <222> (4)..(4)
 <223> Xaa is epsilon aminocaproic acid

<400> 139
 Lys Asp Xaa Xaa Gly Ser Ile Gln Tyr Thr Tyr Gly Xaa Pro Lys
 1 5 10 15

<210> 140
 <211> 13
 <212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (3)..(3)

<223> Xaa is Aib

<400> 140

| | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Asp | Xaa | Gly | Ser | Ile | Gln | Tyr | Thr | Tyr | Gly | Pro | Lys |
| 1 | | | | 5 | | | | | 10 | | | |

<210> 141

<211> .11

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (3)..(3)

<223> Xaa is Aib

<400> 141

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|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Asp | Xaa | Ser | Ile | Gln | Tyr | Thr | Tyr | Pro | Lys |
| 1 | | | 5 | | | | | | 10 | |

<210> 142

<211> 15

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (3) .. (3)

<223> Xaa is Aib

<220>

<221> MOD_RES

<222> (12) .. (13)

<223> Xaa is epsilon-aminocaproic acid

<220>

<221> MOD_RES

<222> (4) .. (5)

<223> Xaa is epsilon aminocaproic acid

<400> 142

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|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Asp | Xaa | Xaa | Xaa | Ser | Ser | Gln | Tyr | Ser | Asn | Xaa | Xaa | Pro | Lys |
| 1 | | | | 5 | | | | | 10 | | | | | 15 |

<210> 143

<211> 15

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (3) .. (3)

<223> Xaa is Aib

<220>

<221> MOD_RES

<222> (13) .. (13)

<223> Xaa is episilon-aminocaproic acid

<220>

<221> MOD_RES

<222> (4) .. (4)

<223> Xaa is epsilon aminocaproic acid

<400> 143

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|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Asp | Xaa | Xaa | Gly | Ser | Ser | Gln | Tyr | Ser | Asn | Gly | Xaa | Pro | Lys |
| 1 | | | | 5 | | | | | 10 | | | | | 15 |

<210> 144

<211> 13

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (3) .. (3)

<223> Xaa is Aib

<400> 144

Lys Asp Xaa Gly Ser Ser Gln Tyr Ser Asn Gly Pro Lys
1 5 10

<210> 145

<211> 11

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (3)..(3)

<223> Xaa is Aib

<400> 145

Lys Asp Xaa Ser Ser Gln Tyr Ser Asn Pro Lys
1 5 10

<210> 146

<211> 15

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (3)..(3)

<223> Xaa is Aib

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<222> (12)..(13)

<223> Xaa is epsilon-aminocaproic acid

<220>

<221> MOD_RES

<222> (4)..(5)

<223> Xaa is epsilon aminocaproic acid

<400> 146

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|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Asp | Xaa | Xaa | Xaa | Ser | Ser | Ile | Tyr | Ser | Gln | Xaa | Xaa | Pro | Lys |
| 1 | | | | 5 | | | | | 10 | | | | | 15 |

<210> 147

<211> 15

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (3)..(3)

<223> Xaa is Aib

<220>

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<222> (13)..(13)

<223> Xaa is epsilon-aminocaproic acid

<220>

<221> MOD_RES

<222> (4)..(4)

<223> Xaa is epsilon aminocaproic acid

<400> 147

| | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Asp | Xaa | Xaa | Gly | Ser | Ser | Ile | Tyr | Ser | Gln | Gly | Xaa | Pro | Lys |
| 1 | | | | 5 | | | | | 10 | | | | | 15 |

<210> 148

<211> 13

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (3)..(3)

<223> Xaa is Aib

<400> 148

| | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Asp | Xaa | Gly | Ser | Ser | Ile | Tyr | Ser | Gln | Gly | Pro | Lys |
| 1 | | | | 5 | | | | | 10 | | | |

<210> 149

<211> 11

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (3)..(3)

<223> Xaa is Aib

<400> 149

| | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Asp | Xaa | Ser | Ser | Ile | Tyr | Ser | Gln | Pro | Lys |
| 1 | | | | 5 | | | | | 10 | |

<210> 150

<211> 20

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (4)..(4)

<223> Xaa is epsilon aminocaproic acid

<220>

<221> MOD_RES

<222> (16)..(16)

<223> Xaa is epsilon-aminocaproic acid

<220>

<221> MOD_RES

<222> (1)..(1)

<223> K is blocked with Fmoc

<400> 150

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Asp | Pro | Xaa | Gly | Ser | Glu | Val | Asn | Leu | Asp | Ala | Glu | Phe | Gly | Xaa |
| 1 | | | | 5 | | | | 10 | | | | | | 15 | |

| | | | |
|-----|-----|-----|-----|
| Pro | Lys | Gly | Tyr |
| | | 20 | |

<210> 151

<211> 18

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (1)..(1)

<223> K is blocked with Fmoc

<220>

<221> MOD_RES

<222> (14)..(14)

<223> Xaa is episilon-aminocaproic acid

<220>

<221> MOD_RES

<222> (4)..(4)

<223> Xaa is epsilon aminocaproic acid

<400> 151

Lys Asp Pro Xaa Gly Leu Glu His Asp Gly Ile Asn Gly Xaa Pro Lys
1 5 10 15

Gly Tyr

<210> 152

<211> 18

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (1)..(1)

<223> K is blocked with Fmoc

<220>

<221> MOD_RES

<222> (14)..(14)

<223> Xaa is episilon-aminocaproic acid

<220>

<221> MOD_RES

<222> (4)..(4)

<223> Xaa is epsilon aminocaproic acid

<400> 152

Lys Asp Pro Xaa Gly Leu Glu Thr Asp Gly Ile Asn Gly Xaa Pro Lys
 1 5 10 15

Gly Tyr

<210> 153

<211> 18

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (1)..(1)

<223> K is blocked with Fmco

<220>

<221> MOD_RES

<222> (14)..(14)

<223> Xaa is episilon-aminocaproic acid

<220>

<221> MOD_RES

<222> (4)..(4)

<223> Xaa is epsilon aminocaproic acid

<400> 153

Lys Asp Pro Xaa Gly Trp Glu His Asp Gly Ile Asn Gly Xaa Pro Lys
 1 5 10 15

Gly Tyr

<210> 154

<211> 15

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (1)..(1)

<223> K is blocked with Fmoc

<220>

<221> MOD_RES

<222> (11)..(11)

<223> Xaa is episilon-aminocaproic acid

<220>

<221> MOD_RES

<222> (4)..(4)

<223> Xaa is epsilon aminocaproic acid

<400> 154

Lys Asp Pro Xaa Gly Tyr Val His Asp Gly Xaa Pro Lys Gly Tyr
1 5 10 15

<210> 155

<211> 18

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (1)..(1)

<223> K is blocked with Fmoc

<220>

<221> MOD_RES

<222> (14)..(14)

<223> Xaa is episilon-aminocaproic acid

<220>

<221> MOD_RES

<222> (4)..(4)

<223> Xaa is epsilon aminocaproic acid

<400> 155

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Asp | Pro | Xaa | Gly | Tyr | Val | His | Asp | Gly | Ile | Asn | Gly | Xaa | Pro | Lys |
| 1 | | | | 5 | | | | | 10 | | | | 15 | | |

Gly Tyr

<210> 156

<211> 14

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (1)..(1)

<223> K is blocked with Fmoc

<220>

<221> MOD_RES

<222> (4)..(4)

<223> Xaa is epsilon aminocaproic acid

<400> 156

Lys Asp Pro Xaa Gly Tyr Val His Asp Ala Pro Lys Gly Tyr
1 5 10

<210> 157

<211> 16

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (1)..(1)

<223> K is blocked with Fmoc

<220>

<221> MOD_RES

<222> (12)..(12)

<223> Xaa is epsilon-aminocaproic acid

<220>

<221> MOD_RES

<222> (4) .. (4)

<223> Xaa is epsilon aminocaproic acid

<400> 157

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Asp | Pro | Xaa | Gly | Ile | Glu | Pro | Asp | Ser | Gly | Xaa | Pro | Lys | Gly | Tyr |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |

<210> 158

<211> 18

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (1) .. (1)

<223> K is blocked with Fmoc

<220>

<221> MOD_RES

<222> (14) .. (14)

<223> Xaa is epsilon-aminocaproic acid

<220>

<221> MOD_RES

<222> (4) .. (4)

<223> Xaa is epsilon aminocaproic acid

<400> 158

Lys Asp Pro Xaa Gly Pro Leu Gly Ile Ala Gly Ile Gly Xaa Pro Lys
1 5 10 15

Gly Tyr

<210> 159

<211> 19

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (1) .. (1)

<223> K is blocked with Fmoc

<220>

<221> MOD_RES

<222> (15) .. (15)

<223> Xaa is episilon-aminocaproic acid

<220>

<221> MOD_RES

<222> (4) .. (4)

<223> Xaa is epsilon aminocaproic acid

<400> 159

Lys Asp Pro Xaa Gly Ser Gln Asn Tyr Pro Ile Val Gln Gly Xaa Pro
1 5 10 15

Lys Gly Tyr

<210> 160

<211> 18

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (1)..(1)

<223> K is blocked with Fa

<220>

<221> MOD_RES

<222> (14)..(14)

<223> Xaa is episilon-aminocaproic acid

<220>

<221> MOD_RES

<222> (4)..(4)

<223> Xaa is epsilon aminocaproic acid

<400> 160

Lys Asp Pro Xaa Gly Glu Asp Val Val Cys Cys Ser Gly Xaa Pro Lys

Gly Tyr

<211> 17

<212> PRT

<213> Artificial

<220>

<223> Peptide spacer

<220>

<221> Artificial

<222> (1) .. (17)

<223> Spacer

<400> 161

Asp Gly Ser Gly Gly Gly Glu Asp Glu Lys Lys Glu Asp Gly Gly Asp
1 5 10 15

Lys

<210> 162

<211> 8

<212> PRT

<213> Artificial

<220>

<223> Peptide spacer

<220>

<221> Artificial

<222> (1) . . (8)

<223> Spacer

<400> 162

Asp Gly Ser Gly Gly Asp Glu Lys
1 5

<210> 163

<211> 9

<212> PRT

<213> Artificial

<220>

<223> Peptide spacer

<220>

<221> Artificial

<222> (1) .. (9)

<223> Spacer

<400> 163

Lys Glu Asp Glu Gly Ser Gly Asp Lys
1 5

<210> 164

<211> 9

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (5) .. (5)

<223> Xaa is norleucine

<400> 164

Asp Ala Ile Pro Xaa Ser Ile Pro Cys
1 5

<210> 165

<211> 11

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (5)..(5)

<223> Xaa is norleucine

<400> 165

Asp Ala Ile Pro Xaa Ser Ile Pro Lys Gly Tyr
1 5 10

<210> 166

<211> 11

<212> PRT


<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> misc_feature



<223> Artificial = synthetic protease indicator

<220>

<221> MOD_RES

<222> (9) .. (9)

<223> K is derivatized with fluorophore

<220>

<221> MOD_RES

<222> (1) .. (1)

<223> D is derivatized with fluorophore

<400> 166

Asp Glu Val Asp Gly Ile Asp Pro Lys Gly Tyr
1 5 10

<210> 167

<211> 12

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> misc_feature

<223> Artificial = synthetic protease indicator

<220>

<221> MOD_RES

<222> (1) .. (1)

<223> P is derivatized with fluorophore

<220>

<221> MOD_RES

<222> (10)..(10)

<223> K is derivatized with fluorophore

<400> 167

| | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Pro | Asp | Glu | Val | Asp | Gly | Ile | Asp | Pro | Lys | Gly | Tyr |
| 1 | | | | 5 | | | | | 10 | | |

<210> 168

<211> 12

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> misc_feature

<223> Artificial sequence = synthetic protease indicator

<220>

<221> MOD_RES


<222> (6)..(6)

<223> Xaa is norleucine (Nlu)

<220>

<221> MOD_RES

<222> (10)..(10)



<223> K is derivatized with fluorophore

<220>

<221> MOD_RES

<222> (1)..(1)

<223> K is blocked with Fmoc

<220>

<221> MOD_RES

<222> (1)..(1)

<223> K is derivatized with fluorophore

<400> 168

Lys Asp Ala Ile Pro Xaa Ser Ile Pro Lys Gly Tyr
1 5 10

<210> 169

<211> 12

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> misc_feature

<223> Artificial sequence = synthetic protease indicator

<220>

<221> MOD_RES

<222> (1)..(1)

<223> K is derivatized with fluorophore

<220>

<221> MOD_RES

<222> (10)..(10)

<223> K is derivatized with fluorophore

<220>

<221> MOD_RES

<222> (6)..(6)

<223> Xaa is norleucine (Nlu)

<400> 169

Lys Asp Ala Ile Pro Xaa Ser Ile Pro Lys Gly Tyr
1 5 10

<210> 170

<211> 11

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> misc_feature

<223> Artificial = synthetic protease indicator

<220>

<221> MOD_RES

<222> (1)..(1)

<223> D is blocked wiht Fmoc

<220>

<221> MOD_RES

<222> (5) .. (5)

<223> Xaa is norleucine (Nlu)

<220>

<221> MOD_RES

<222> (9) .. (9)

<223> K is derivatized with fluorophore

<400> 170

| | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asp | Ala | Ile | Pro | Xaa | Ser | Ile | Pro | Lys | Gly | Tyr |
| 1 | | | 5 | | | | | 10 | | |

<210> 171

<211> 14

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> misc_feature

<223> ARTIFICIAL = synthetic protease indicator

<220>

<221> MOD_RES

<222> (1) .. (1)

<223> K is blocked with Fmoc

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<221> MOD_RES

<222> (1)..(1)

<223> K is derivatized with fluorophore

<220>

<221> MOD_RES

<222> (12)..(12)

<223> K is derivatized with fluorophore

<400> 171

| | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Asp | Asx | Asp | Glu | Val | Asp | Gly | Ile | Asp | Pro | Lys | Gly | Tyr |
| 1 | | | | 5 | | | | 10 | | | | | |

<210> 172

<211> 14

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> misc_feature

<223> Artificial = synthetic protease indicator

<220>

<221> misc_feature

<222> (1)..(1)

<223> K is derivatized with fluorophore

<220>

<221> misc_feature

<222> (12)..(12)

<223> K is derivatized with fluorophore

<400> 172

Lys Asp Asx Asp Glu Val Asp Gly Ile Asp Pro Lys Gly Tyr
1 5 10

<210> 173

<211> 14

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> misc_feature

<223> ARTIFICIAL/UNKNOWN = synthetic protease indicator

<220>

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<222> (1)..(1)

<223> K is derivatized with fluroophore

<220>

<221> MOD_RES

<222> (1)..(1)

<223> K is blocked with Fmoc

<220>

<221> MOD_RES

<222> (12)..(12)

<223> K is derivatized with fluroophore

<400> 173

Lys Asp Asx Asp Glu Val Asn Gly Ile Asp Pro Lys Gly Tyr
1 5 10

<210> 174

<211> 14

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> misc_feature

<223> ARTIFICIAL/UNKNOWN = synthetic protease indicator

<220>

<221> misc_feature

<222> (1)..(1)

<223> K is derivatized with fluorophore

<220>

<221> misc_feature

<222> (12)..(12)

<223> K is derivatized with fluorophore

<400> 174

Lys Asp Asx Asp Glu Val Asn Gly Ile Asp Pro Lys Gly Tyr
1 5 10

<210> 175

<211> 13

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> misc_feature

<223> ARTIFICIAL/UNKNOWN = synthetic protease indicator

<220>

<221> MOD_RES

<222> (1)..(1)

<223> K is blocked with Fmoc

<220>

<221> MOD_RES

<222> (11)..(11)

<223> K is derivatized with fluorophore

<400> 175

Lys Asp Asx Glu Val Asp Gly Ile Asp Pro Lys Gly Tyr
1 5 10

<210> 176

<211> 13

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> misc_feature

<223> ARTIFICIAL/UNKNOWN = synthetic protease indicator

<220>

<221> MOD_RES

<222> (1)..(1)

<223> K is derivatized with fluorophore

<220>

<221> MOD_RES

<222> (11)..(11)

<223> K is derivatized with fluorophore

<400> 176

Lys Asp Tyr Asx Ala Asp Gly Ile Asp Pro Lys Gly Tyr
1 5 10

<210> 177

<211> 16

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> misc_feature

<223> ARTIFICIAL/UNKNOWN = synthetic protease indicator

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<222> (1)..(1)

<223> K is blocked with Fmoc

<220>

<221> MOD_RES

<222> (1)..(1)

<223> K is derivatized with fluorophore

<220>

<221> MOD_RES

<222> (14)..(14)

<223> K is derivatized with fluorophore

<400> 177

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Asp | Asx | Gly | Asp | Glu | Val | Asp | Gly | Ile | Asp | Gly | Pro | Lys | Gly | Tyr |
| 1 | | | | 5 | | | | 10 | | | | | | 15 | |

<210> 178

<211> 18

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate
 <220>
 <221> misc_feature
 <223> ARTIFICIAL/UNKNOWN = synthetic protease indicator

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 <220>
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 <223> K is derivatized with fluorophore

 <220>
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 <222> (16)..(16)
 <223> K is derivatized with fluorophore

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 <222> (14)..(14)
 <223> Xaa is epsilon aminocaproic acid

 <220>
 <221> MOD_RES
 <222> (4)..(4)

<223> Xaa is episilon aminocaproic acid

<400> 178

Lys Asp Asx Xaa Gly Asp Glu Val Asp Gly Ile Asp Gly Xaa Pro Lys
1 5 10 15

Gly Tyr

<210> 179

<211> 18

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (1)..(1)

<223> K is derivatized with benzyloxycarbonyl group

<220>

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<222> (4)..(4)

<223> Xaa is episilon aminocaproic acid

<220>

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<222> (14)..(14)

<223> Xaa is episilon aminocaproic acid

<220>

<221> misc_feature

<223> ARTIFICIAL/UNKNOWN = synthetic protease indicator

<220>

<221> MOD_RES

<222> (1)..(1)

<223> K is derivatized with fluorophore

<220>

<221> MOD_RES

<222> (16)..(16)

<223> K is derivatized with fluorophore

<400> 179

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Asp | Asx | Xaa | Gly | Asp | Glu | Val | Asp | Gly | Ile | Asp | Gly | Xaa | Pro | Lys |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |

Gly Tyr

<210> 180

<211> 13

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> misc_feature

<223> ARTIFICIAL/UNKNOWN = synthetic protease indicator

<220>

<221> MOD_RES

<222> (1)..(1)

<223> K is blocked with Fmoc

<220>

<221> MOD_RES

<222> (1)..(1)

<223> K is derivatized with fluorophore

<220>

<221> MOD_RES

<222> (11)..(11)

<223> K is derivatized with fluorophore

<400> 180

| | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Asp | Tyr | Asx | Ala | Asp | Gly | Ile | Asp | Pro | Lys | Gly | Tyr |
| 1 | | | | 5 | | | | | 10 | | | |

<210> 181

<211> 13

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> misc_feature

<223> ARTIFICIAL/UNKNOWN = synthetic protease indicator

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<221> MOD_RES

<222> (1)..(1)

<223> K is derivatized with fluorophore

<220>

<221> MOD_RES

<222> (11)..(11)

<223> K is derivatized with fluorophore

<400> 181

Lys Asp Asx Glu Val Asp Gly Ile Asp Pro Lys Gly Tyr
1 5 10

<210> 182

<211> 12

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> misc_feature

<223> Artificial = synthetic protease indicator

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<221> MOD_RES

<222> (1)..(1)

<223> K is blocked with Fmoc

<220>

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<222> (1)..(1)

<223> K is derivatized with fluorophore

<220>

<221> MOD_RES

<222> (10)..(10)

<223> K is derivatized with fluorophore

<220>

<221> MOD_RES

<222> (6)..(6)

<223> Xaa is norleucine (Nlu)

<400> 182

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|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Asp | Ala | Ile | Pro | Xaa | Ser | Ile | Pro | Lys | Gly | Tyr |
| 1 | | | | 5 | | | | | 10 | | |

<210> 183

<211> 18

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> misc_feature

<223> Artificial = synthetic protease indicator

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<223> K is blocked with Fmoc

<220>

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<222> (1)..(1)

<223> K is derivatized with fluorophore

<220>

<221> MOD_RES

<222> (16)..(16)

<223> K is derivatized with fluorophore

<220>

<221> MOD_RES

<222> (4)..(4)

<223> Xaa is epsilon aminocaproic acid

<220>

<221> MOD_RES

<222> (14)..(14)

<223> Xaa is epsilon aminocaproic acid

<400> 183

Lys Asp Asx Xaa Gly Asp Glu Val Asp Gly Ile Asp Gly Xaa Pro Lys
1 5 10 15

Gly Tyr

<210> 184

<211> 18

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> misc_feature

<223> Artificial = synthetic protease indicator

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<222> (1)..(1)

<223> K is blocked with Fmoc

<220>

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<222> (1)..(1)

<223> K is derivatized with fluorophore

<220>

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<222> (16)..(16)

<223> K is derivatized with fluorophore

<220>

<221> MOD_RES

<222> (4)..(4)

<223> Xaa is episilonaminocaproic acid

<220>

<221> MOD_RES

<222> (14)..(14)

<223> Xaa is episilonaminocaproic acid

<400> 184

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Asp | Asx | Xaa | Gly | Asp | Glu | Val | Asp | Gly | Ile | Asp | Gly | Xaa | Pro | Lys |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |

Gly Tyr

<210> 185

<211> 14

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> misc_feature

<223> Artificial = synthetic protease indicator

<220>

<221> MOD_RES

<222> (1)..(1)

<223> K is derivatized with a fluorophore

<220>

<221> MOD_RES

<222> (12)..(12)

<223> K is derivatized with a fluorophore

<400> 185

Lys Asp Asx Asp Glu Val Asp Gly Ile Asp Pro Lys Gly Tyr
1 5 10

<210> 186

<211> 8

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> misc_feature

<223> Artificial = central protease recognition domain

<400> 186

Gly Asp Glu Val Asp Gly Ile Asp
1 5

<210> 187

<211> 4

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> misc_feature
<223> Artificial = tetrapeptide core

<220>
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<222> (3)..(3)
<223> Xaa is alpha aminobutyric acid (Aib)

<400> 187

Lys Asp Xaa Gly
1

<210> 188
<211> 5
<212> PRT
<213> Artificial

<220>
<223> Synthetic peptide substrate
<220>
<221> misc_feature
<223> Artificial = pentapeptide core

<220>
<221> MOD_RES
<222> (3)..(3)
<223> Xaa is alpha aminobutyric acid (Aib)

<220>
<221> MOD_RES

<222> (4)..(4)

<223> Xaa is episilonaminocaproic acid

<400> 188

Lys Asp Xaa Xaa Gly
1 5

<210> 189

<211> 4

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> misc_feature

<223> Artificial = CDR domain

<220>

<221> MOD_RES

<222> (2)..(2)

<223> Xaa is alpha episilonaminocaproic acid

<400> 189

Gly Xaa Pro Lys
1

<210> 190

<211> 14

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> misc_feature

<223> Artificial = synthetic protease indicator

<220>

<221> MOD_RES

<222> (1)..(1)

<223> K is blocked with Fmoc

<220>

<221> MOD_RES

<222> (1)..(1)

<223> K is derivatized with fluorophore

<220>

<221> MOD_RES

<222> (12)..(12)

<223> K is derivatized with fluorophore

<400> 190

Lys Asp Asx Asp Glu Val Asp Gly Ile Asp Pro Lys Gly Tyr
1 5 10

<210> 191

<211> 14

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

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<223> Artificial = synthetic protease indicator

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<221> MOD_RES

<222> (1)..(1)

<223> K is blocked with Fmoc

<220>

<221> MOD_RES

<222> (1)..(1)

<223> K is derivatized with fluorophore

<220>

<221> MOD_RES

<222> (12)..(12)

<223> K is derivatized with fluorophore

<400> 191

Lys Asp Asx Asp Glu Val Asp Gly Ile Asp Pro Lys Gly Tyr
1 5 10

<210> 192

<211> 18

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> misc_feature

<223> Artificial = synthetic protease indicator

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<222> (1)..(1)

<223> K is blocked with Fmoc

<220>

<221> MOD_RES

<222> (1)..(1)

<223> K is derivatized with fluorophore

<220>

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<222> (16)..(16)

<223> K is derivatized with fluorophore

<220>

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<222> (4)..(4)

<223> Xaa is episilonaminocaproic acid

<220>

<221> MOD_RES

<222> (14)..(14)

<223> Xaa is episilonaminocaproic acid

<400> 192

Lys Asp Asx Xaa Gly Asp Glu Val Asp Gly Ile Asp Gly Xaa Pro Lys
1 5 10 15

Gly Tyr

<210> 193

<211> 7

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> Artificial

<222> (1)..(7)

<223> Artificial synthethic protease substrate

<400> 193

Asp Glu Val Asp Gly Ile Asn
1 5

<210> 194

<211> 8

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (1)..(1)

<223> Xaa is D form of tetrahydroisoquinoline-3-carboxylic acid

<400> 194

Xaa Asp Glu Val Asp Gly Ile Asn
1 5

<210> 195

<211> 7

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> Artificial

<222> (1)..(7)

<223> Artificial protease substrate

<400> 195

Asp Glu Val Asp Gly Ile Asp
1 5

<210> 196

<211> 7

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> Artificial

<222> (1)..(7)

<223> Artificial protease substrate

<400> 196

Leu Val Glu Ile Asp Asn Gly
1 5

<210> 197

<211> 8

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> Artificial

<222> (1)..(7)

<223> Artificial protease substrate

<400> 197

Gly Ile Glu Thr Glu Ser Gly Val
1 5

<210> 198

<211> 4

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> Artificial

<222> (1)..(4)

<223> Artificial protease substrate

<400> 198

Thr Gly Arg Thr
1

<210> 199

<211> 6

<212> PRT

<213> Artificial

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<223> Synthetic peptide substrate

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<222> (1)..(6)

<223> Artificial protease substrate

<400> 199

Val Met Thr Gly Arg Thr
1 5

<210> 200

<211> 9

<212> PRT

<213> Artificial

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<223> Synthetic peptide substrate
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<222> (1)..(9)
<223> Artificial protease substrate

<400> 200

Ser Glu Val Lys Leu Asp Ala Glu Phe
1 5

<210> 201
<211> 9
<212> PRT
<213> Artificial

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<222> (2)..(2)
<223> E is D form

<220>
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<222> (9)..(9)
<223> L is D form

<220>
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<222> (5)..(5)

<223> L is D form

<400> 201

Ser Glu Val Lys Leu Asp Ala Glu Phe
1 5

<210> 202

<211> 7

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> Artificial

<222> (1)..(7)

<223> Artificial peptide substrate

<400> 202

Glu Asp Val Val Cys Cys Ser
1 5

<210> 203

<211> 7

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> Artificial

<222> (1)..(7)

<223> Artificial protease substrate

<400> 203

Glu Glu Val Glu Gly Ile Asn
1 5

<210> 204

<211> 7

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

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<222> (2)..(2)

<223> F is D form

<400> 204

Asp Phe Val Asp Gly Ile Asn
1 5

<210> 205

<211> 7

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (1)..(1)

<223> D is D form

<220>

<221> MOD_RES

<222> (4)..(4)

<223> D is D form

<400> 205

Asp Glu Val Asp Gly Ile Asn
1 5

<210> 206

<211> 7

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> Artificial

<222> (1)..(7)

<223> Artificial protease substrate

<400> 206

Leu Val Glu Ile Glu Asn Gly
1 5

<210> 207

<211> 7

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> Artificial

<222> (1)..(7)

<223> Artificial protease substrate

<400> 207

Gly Ile Glu Thr Asp Ser Gly
1 5

<210> 208

<211> 7

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> Artificial

<222> (1)..(7)

<223> Artificial protease substrate

<400> 208

Gly Ile Glu Thr Glu Ser Gly
1 5

<210> 209

<211> 7

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> Artificial

<222> (1)..(7)

<223> Artificial protease substrate

<400> 209

Leu Glu His Asp Gly Ile Asn
1 5

<210> 210

<211> 7

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> Artificial

<222> (1)..(7)

<223> Artificial protease substrate

<400> 210

Leu Glu Thr Asp Gly Ile Asn
1 5

<210> 211

<211> 7

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> Artificial

<222> (1)..(7)

<223> Artificial protease substrate

<400> 211

Trp Glu His Asp Gly Ile Asn
1 5

<210> 212

<211> 5

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> Artificial

<222> (1)..(5)

<223> Artificial protease substrate

<400> 212

Tyr Val His Asp Gly
1 5

<210> 213

<211> 7

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> Artificial

<222> (1)..(7)

<223> Artificial protease substrate

<400> 213

Tyr Val His Asp Gly Ile Asn
1 5

<210> 214

<211> 5

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> Artificial

<222> (1)..(5)

<223> Artificial protease substrate

<400> 214

Tyr Val His Asp Ala
1 5

<210> 215

<211> 5

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

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<222> (1) .. (5)

<223> Artificial protease substrate

<400> 215

Thr Gly Arg Thr Gly
1 5

<210> 216

<211> 9

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (2) .. (2)

<223> E is D form

<220>

<221> MOD_RES

<222> (9) .. (9)

<223> F is D form

<220>

<221> MOD_RES

<222> (5)..(5)

<223> L is D form

<400> 216

Ser Glu Val Lys Leu Asp Ala Glu Phe
1 5

<210> 217

<211> 5

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> Artificial

<222> (1)..(5)

<223> Artificial protease substrate

<400> 217

Ile Glu Pro Asp Ser
1 5

<210> 218

<211> 7

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> Artificial

<222> (1)..(5)

<223> Artificial protease substrate

<400> 218

Pro Leu Gly Ile Ala Gly Ile
1 5

<210> 219

<211> 8

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> Artificial

<222> (1)..(8)

<223> Artificial protease substrate

<400> 219

Ser Gln Asn Tyr Pro Ile Val Gln
1 5

<210> 220

<211> 18

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (1)..(1)

<223> K is blocked with Fmoc

<220>

<221> MOD_RES

<222> (14)..(14)

<223> Xaa is episilon-aminocaproic acid

<220>

<221> MOD_RES

<222> (4)..(4)

<223> Xaa is episilon-aminocaproic acid

<400> 220

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Asp | Pro | Xaa | Gly | Asp | Glu | Val | Asp | Gly | Ile | Asn | Gly | Xaa | Pro | Lys |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |

Gly Tyr

<210> 221

<211> 16

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (1)..(1)

<223> K is blocked with Fmoc

<220>

<221> MOD_RES

<222> (4)..(4)

<223> Xaa is episilon-aminocaproic acid

<220>

<221> MOD_RES

<222> (14)..(14)

<223> Xaa is episilon-aminocaproic acid

<220>

<221> MOD_RES

<222> (16)..(16)

<223> K is blocked with amide

<400> 221

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Asp | Pro | Xaa | Gly | Asp | Glu | Val | Asp | Gly | Ile | Asn | Gly | Xaa | Pro | Lys |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |

<210> 222

<211> 19

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate
 <220>
 <221> MOD_RES
 <222> (1)..(1)
 <223> K is blocked with Fmoc

 <220>
 <221> MOD_RES
 <222> (6)..(6)
 <223> Xaa is D form tetrahydroisoquinoline-3-carboxylic acid

 <220>
 <221> MOD_RES
 <222> (4)..(4)
 <223> Xaa is episilon-aminocaproic acid

 <220>
 <221> MOD_RES
 <222> (15)..(15)
 <223> Xaa is episilon-aminocaproic acid

 <400> 222
 Lys Asp Pro Xaa Gly Xaa Asp Glu Val Asp Gly Ile Asn Gly Xaa Pro
 1 5 10 15
 Lys Gly Tyr

 <210> 223
 <211> 17
 <212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (1)..(1)

<223> K is blocked with Fmoc

<220>

<221> MOD_RES

<222> (4)..(4)

<223> Xaa is epsilon-aminocaproic acid

<400> 223

Lys Asp Pro Xaa Gly Asp Glu Val Asp Gly Ile Asn Gly Pro Lys Gly
1 5 10 15

Tyr

<210> 224

<211> 17

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (1)..(1)

<223> K is blocked with Fmoc

<220>

<221> MOD_RES

<222> (13)..(13)

<223> Xaa is episilon-aminocaproic acid

<400> 224

Lys Asp Pro Gly Asp Glu Val Asp Gly Ile Asn Gly Xaa Pro Lys Gly
1 5 10 15

Tyr

<210> 225

<211> 16

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (1)..(1)

<223> K is blocked with Fmoc

<220>

<221> MOD_RES

<222> (4)..(4)

<223> Xaa is episilon-aminocaproic acid

<220>

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<222> (14)..(14)

<223> Xaa is episilon-aminocaproic acid

<220>

<221> MOD_RES

<222> (16)..(16)

<223> K is blocked with amide

<400> 225

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Asp | Pro | Xaa | Gly | Asp | Glu | Val | Asp | Gly | Ile | Asp | Gly | Xaa | Pro | Lys |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |

<210> 226

<211> 17

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (4)..(4)

<223> Xaa is episilon-aminocaproic acid

<220>

<221> MOD_RES

<222> (13)..(13)

<223> Xaa is episilon-aminocaproic acid

<220>

<221> MOD_RES

<222> (1)..(1)

<223> K is blocked with Fmoc

<400> 226

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Asp | Pro | Xaa | Gly | Leu | Val | Glu | Ile | Asp | Asn | Gly | Xaa | Pro | Lys | Gly |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |

Tyr

<210> 227

<211> 18

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (1)..(1)

<223> K is blocked with Fmoc

<220>

<221> MOD_RES

<222> (4)..(4)

<223> Xaa is episilon-aminocaproic acid

<220>

<221> MOD_RES

<222> (14)..(14)

<223> Xaa is epsilon-aminocaproic acid

<400> 227

Lys Asp Pro Xaa Gly Ile Glu Thr Glu Ser Gly Val Gly Xaa Pro Lys
1 5 10 15

Gly Tyr

<210> 228

<211> 13

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (1)..(1)

<223> K is blocked with Fmoc

<220>

<221> MOD_RES

<222> (4)..(4)

<223> Xaa is epsilon-aminocaproic acid

<400> 228

Lys Asp Pro Xaa Thr Gly Arg Thr Gly Pro Lys Gly Tyr
1 5 10

<210> 229

<211> 11

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (1)..(1)

<223> D is blocked with Fmoc

<400> 229

| | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asp | Pro | Thr | Gly | Arg | Thr | Gly | Pro | Lys | Gly | Tyr |
| 1 | | | | 5 | | | | | 10 | |

<210> 230

<211> 15

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (1)..(1)

<223> K is blocked with Fmoc

<220>

<221> MOD_RES

<222> (11)..(11)

<223> Xaa is episilon-aminocaproic acid

<400> 230

Lys Asp Pro Val Met Thr Gly Arg Thr Gly Xaa Pro Lys Gly Tyr
1 5 10 15

<210> 231

<211> 13

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (1)..(1)

<223> K is blocked with Fmoc

<220>

<221> MOD_RES

<222> (9)..(9)

<223> Xaa is epsilon-aminocaproic acid

<400> 231

Lys Asp Pro Thr Gly Arg Thr Gly Xaa Pro Lys Gly Tyr
1 5 10

<210> 232

<211> 15

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (1)..(1)

<223> K is blocked with Fmoc

<220>

<221> MOD_RES

<222> (4)..(4)

<223> Xaa is episilon-aminocaproic acid

<220>

<221> MOD_RES

<222> (11)..(11)

<223> Xaa is episilon-aminocaproic acid

<400> 232

| | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Asp | Pro | Xaa | Gly | Thr | Gly | Arg | Thr | Gly | Xaa | Pro | Lys | Gly | Tyr |
| 1 | | | | 5 | | | | | 10 | | | | 15 | |

<210> 233

<211> 14

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (1)..(1)

<223> K is blocked with Fmoc

<220>

<221> MOD_RES

<222> (4)..(4)

<223> Xaa is epsilon-aminocaproic acid

<400> 233

Lys Asp Pro Xaa Gly Thr Gly Arg Thr Gly Pro Lys Gly Tyr
1 5 10

<210> 234

<211> 13

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (1)..(1)

<223> K is blocked with Fmoc

<400> 234

Lys Asp Pro Gly Thr Gly Arg Thr Gly Pro Lys Gly Tyr
1 5 10

<210> 235

<211> 20

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (1)..(1)

<223> K is blocked with Fmoc

<220>

<221> MOD_RES

<222> (4)..(4)

<223> Xaa is episilon-aminocaproic acid

<220>

<221> MOD_RES

<222> (16)..(16)

<223> Xaa is episilon-aminocaproic acid

<400> 235

Lys Asp Pro Xaa Gly Ser Glu Val Lys Leu Asp Ala Glu Phe Gly Xaa
1 5 10 15

Pro Lys Gly Tyr
20

<210> 236

<211> 21

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (1)..(1)

<223> K is blocked with Fmoc

<220>

<221> MOD_RES

<222> (14)..(14)

<223> F is D form

<220>

<221> MOD_RES

<222> (10)..(10)

<223> L is D form

<220>

<221> MOD_RES

<222> (7)..(7)

<223> E is D form

<220>

<221> MOD_RES

<222> (4)..(4)

<223> Xaa is epsilon-aminocaproic acid

<400> 236

Lys Asp Pro Xaa Gly Ser Glu Val Lys Leu Asp Ala Glu Phe Gly Cys
1 5 10 15

Pro Lys Asp Asp Tyr
20

<210> 237

<211> 18

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (1)..(1)

<223> K is blocked with Fa

<220>

<221> MOD_RES

<222> (4)..(4)

<223> Xaa is episilon-aminocaproic acid

<220>

<221> MOD_RES

<222> (14)..(14)

<223> Xaa is episilon-aminocaproic acid

<400> 237

Lys Asp Pro Xaa Gly Glu Asp Val Val Cys Cys Ser Gly Xaa Pro Lys
1 5 10 15

Gly Tyr

<210> 238

<211> 18

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (4)..(4)

<223> Xaa is episilon-aminocaproic acid

<220>

<221> MOD_RES

<222> (14)..(14)

<223> Xaa is episilon-aminocaproic acid

<400> 238

Lys Asp Pro Xaa Gly Glu Glu Val Glu Gly Ile Asn Gly Xaa Pro Lys
1 5 10 15

Gly Tyr

<210> 239

<211> 18

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (7)..(7)

<223> F is D form

<220>

<221> MOD_RES

<222> (4) .. (4)

<223> Xaa is episilon-aminocaproic acid

<220>

<221> MOD_RES

<222> (14) .. (14)

<223> Xaa is episilon-aminocaproic acid

<400> 239

Lys Asp Pro Xaa Gly Asp Phe Val Asp Gly Ile Asn Gly Xaa Pro Lys
1 5 10 15

Gly Tyr

<210> 240

<211> 18

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (14) .. (14)

<223> Xaa is episilon-aminocaproic acid

<220>

<221> MOD_RES

<222> (6)..(6)

<223> D is D form

<220>

<221> MOD_RES

<222> (9)..(9)

<223> D is D form

<220>

<221> MOD_RES

<222> (4)..(4)

<223> Xaa is episilon-aminocaproic acid

<400> 240

Lys Asp Pro Xaa Gly Asp Glu Val Asp Gly Ile Asn Gly Xaa Pro Lys
1 5 10 15

Gly Tyr

<210> 241

<211> 17

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (4)..(4)

<223> Xaa is episilon-aminocaproic acid

<220>

<221> MOD_RES

<222> (14)..(14) .

<223> Xaa is episilon-aminocaproic acid

<400> 241

Lys Asp Pro Xaa Gly Leu Val Glu Ile Glu Asn Gly Xaa Pro Lys Gly
1 5 10 15

Tyr

<210> 242

<211> 16

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (4)..(4)

<223> Xaa is episilon-aminocaproic acid

<220>

<221> MOD_RES

<222> (12)..(12)

<223> Xaa is episilon-aminocaproic acid

<400> 242

Lys Asp Pro Xaa Gly Ile Glu Thr Asp Ser Gly Xaa Pro Lys Gly Tyr
1 5 10 15

<210> 243

<211> 16

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (4)..(4)

<223> Xaa is episilon-aminocaproic acid

<220>

<221> MOD_RES

<222> (12)..(12)

<223> Xaa is episilon-aminocaproic acid

<400> 243

Lys Asp Pro Xaa Gly Ile Glu Thr Glu Ser Gly Xaa Pro Lys Gly Tyr
1 5 10 15

<210> 244

<211> 18

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (4)..(4)

<223> Xaa is episilon-aminocaproic acid

<220>

<221> MOD_RES

<222> (14)..(14)

<223> Xaa is episilon-aminocaproic acid

<400> 244

Lys Asp Pro Xaa Gly Leu Glu His Asp Gly Ile Asn Gly Xaa Pro Lys
1 5 10 15

Gly Tyr

<210> 245

<211> 18

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (4)..(4)

<223> Xaa is episilon-aminocaproic acid

<220>

<221> MOD_RES

<222> (14)..(14)

<223> Xaa is epsilon-aminocaproic acid

<400> 245

Lys Asp Pro Xaa Gly Leu Glu Thr Asp Gly Ile Asn Gly Xaa Pro Lys
1 5 10 15

Gly Tyr

<210> 246

<211> 18

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (4)..(4)

<223> Xaa is epsilon-aminocaproic acid

<220>

<221> MOD_RES

<222> (14)..(14)

<223> Xaa is epsilon-aminocaproic acid

<400> 246

Lys Asp Pro Xaa Gly Trp Glu His Asp Gly Ile Asn Gly Xaa Pro Lys
1 5 10 15

Gly Tyr

<210> 247

<211> 15

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (4)..(4)

<223> Xaa is episilon-aminocaproic acid

<220>

<221> MOD_RES

<222> (11)..(11)

<223> Xaa is episilon-aminocaproic acid

<400> 247

Lys Asp Pro Xaa Gly Tyr Val His Asp Gly Xaa Pro Lys Gly Tyr
1 5 10 15

<210> 248

<211> 18

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (4)..(4)

<223> Xaa is epsilon-aminocaproic acid

<220>

<221> MOD_RES

<222> (14)..(14)

<223> Xaa is epsilon-aminocaproic acid

<400> 248

Lys Asp Pro Xaa Gly Tyr Val His Asp Gly Ile Asn Gly Xaa Pro Lys
1 5 10 15

Gly Tyr

<210> 249

<211> 14

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (4)..(4)

<223> Xaa is epsilon-aminocaproic acid

<400> 249

Lys Asp Pro Xaa Gly Tyr Val His Asp Ala Pro Lys Gly Tyr
1 5 10

<210> 250

<211> 14

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (4)..(4)

<223> Xaa is episilon-aminocaproic acid

<220>

<221> MOD_RES

<222> (14)..(14)

<223> Xaa is episilon-aminocaproic acid

<400> 250

Lys Asp Pro Xaa Thr Gly Arg Thr Gly Xaa Pro Lys Gly Tyr
1 5 10

<210> 251

<211> 13

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (4)..(4)

<223> 4-aminobutyric acid

<400> 251

Lys Asp Pro Xaa Thr Gly Arg Thr Gly Pro Lys Gly Tyr
1 5 10

<210> 252

<211> 13

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (4) .. (4)

<223> Xis 8-aminocaprylic acid

<400> 252

Lys Asp Pro Xaa Thr Gly Arg Thr Gly Pro Lys Gly Tyr
1 5 10

<210> 253

<211> 20

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (4) .. (4)

<223> Xaa is 4-aminobutyric acid

<220>

<221> MOD_RES

<222> (16)..(16)

<223> Xaa is epsilon-aminocaproic acid

<220>

<221> MOD_RES

<222> (14)..(14)

<223> F is D form

<220>

<221> MOD_RES

<222> (7)..(7)

<223> E is D form

<220>

<221> MOD_RES

<222> (10)..(10)

<223> L is D form

<400> 253

Lys Asp Pro Xaa Gly Ser Glu Val Lys Leu Asp Ala Glu Phe Gly Xaa
1 5 10 15

Pro Lys Gly Tyr
20

<210> 254

<211> 16

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (4) .. (4)

<223> Xaa is episilon-aminocaproic acid

<220>

<221> MOD_RES

<222> (12) .. (12)

<223> Xaa is episilon-aminocaproic acid

<400> 254

Lys Asp Pro Xaa Gly Ile Glu Pro Asp Ser Gly Xaa Pro Lys Gly Tyr
1 5 10 15

<210> 255

<211> 18

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (4) .. (4)

<223> Xaa is episilon-aminocaproic acid

<220>

<221> MOD_RES

<222> (14)..(14)

<223> Xaa is episilon-aminocaproic acid

<400> 255

Lys Asp Pro Xaa Gly Pro Leu Gly Ile Ala Gly Ile Gly Xaa Pro Lys
1 5 10 15

Gly Tyr

<210> 256

<211> 19

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> MOD_RES

<222> (4)..(4)

<223> Xaa is episilon-aminocaproic acid

<220>

<221> MOD_RES

<222> (15)..(15)

<223> Xaa is episilon-aminocaproic acid

<400> 256

Lys Asp Pro Xaa Gly Ser Gln Asn Tyr Pro Ile Val Gln Gly Xaa Pro
1 5 10 15

Lys Gly Tyr

<210> 257

<211> 4

<212> PRT

<213> Artificial

<220>

<223> Synthetic peptide substrate

<220>

<221> misc_feature

<223>. Artificial = protease binding domain

<400> 257

Gly Gly Gly Gly

1